



LINK ELECTRONICS, INC.



MADE IN THE USA

CAPTION ENCODER/DECODER SD SDI/ANALOG

MODEL PTC-892



FEATURES

- ◆ V-Chip compatible & TSID ready
- ◆ Dual RS-232 com ports
- ◆ LTC input & "B" Type USB port
- ◆ Detailed front panel display with menus
- ◆ Data Recovery of both caption & text
- ◆ Weather Lift up to 4 lines
- ◆ SD SDI/analog encoded outputs
- ◆ User selectable data recovery modes
- ◆ Firmware version viewed from front panel
- ◆ User, power-up, and factory default settings
- ◆ SD analog decoded outputs including component
- ◆ Optional Modem w/ RI, OH, and CD indication
- ◆ User selectable encode modes, including newswire
- ◆ SD SDI to SD analog conversion
- ◆ Auto Detection of NTSC/PAL
- ◆ Encodes both caption and text

The PTC-892 is captioning encoder, decoder, and data recover capable of inserting, decoding, and recovering data of captions and text for NTSC/PAL for the following signals: composite, Y/C, S-video, RGB, YUV, and SDI.

Captioning and text may be inserted (encoded) in either field of the Vertical Blanking Interval (VBI). That inserted data may be displayed as open captions through the decoder output(s). In addition, caption data on the incoming or outgoing video may be recovered from either field of the VBI. This data can be sent to another encoder, to a language translation machine or program then re-encoded, or to be captured by a program to be manipulated. Each of these important functions (encoding, decoding, and data recovery) may be done simultaneously. Each of these functions can be controlled by the front panel menus or by serial communications.

Inputs and outputs are provided for both SD SDI and SD analog, including composite, Y/C, S-video, YUV and RGB. The power loss feature bypasses the composite analog and SDI when AC power to the PTC-892 fails.

In response to the FCC mandated requirements, captions shall not interfere with emergency crawls. The PTC-892 incorporates a weather-lift feature that moves the caption up to 4 lines, whenever a contact-closure is detected on its GPI input. The number of lines can be controlled by the front panel or by software commands.

The serial communication port(s) allow for remote captioning. The dual ports allow multiple

encoders to be controlled at once, a back up communication port, or to do data recovery out of its ports. Port 1 is either a "B" type USB port or RS-232 port. Port 2 is either a RS-232 port or an optional modem. Both ports can be set to have different baud rates (1200, 2400, 4800, 9600, 19200, 38400) independently through the front panel menus.

RS-232 port 2 will not go down to a baud rate of 1200, because new modems will not allow this. When the optional modem goes off-hook, it takes priority over the RS-232 port 2. The RS-232 port 2 control is restored when the modem hangs up.

Front panel LEDs show the unit status with NTSC/PAL detection, modem status, encode on/off, video presence detection, negative pedestal on/off, serial data detection, and LTC detection. Front panel push buttons allow the user to select input, select output, perform an encoder test, and bypass the encoder.

The PTC-892 is V-chip technology compliant and TSID ready. Link Electronics is incorporating this technology in the firmware of the PTC-892. The PTC-892 handles automatic repetition of the "V-Chip" data and can interweave it with existing line 21 closed captioning data.

The PTC-892 has a Longitudinal Time Code (LTC) input for precise caption timing with the video. A front panel Vacuum Fluorescent Display (VFD) shows various functions and menus. A rotary optical encoder, front panel knob, provides easy selection of the various operating and set-up functions.

MODEL PTC-892 CAPTION ENCODER/DECODER DIGITAL AND ANALOG SPECIFICATIONS

VIDEO INPUTS:

SD SDI:
Connector one, BNC
Standard SMPTE 259M-C 270Mb/s
Impedance 75 Ohm, terminated
Signal Level 800mV \pm 10%
Return Loss >18db to 270 MHz

SD analog:
CV, Y and G (with sync) one, BNC
C, U and B one, BNC
V and R one, BNC
S-video one, mini-din
Impedance 75 Ohm, terminated
CV, Y and G (with sync) 1Vpp \pm 3db
R, B, U and V (100% Sat) ... 0.7Vpp \pm 3db
C (100% Sat) 0.8Vpp \pm 3db
Return Loss 40db
Maximum DC on input 3.2V DC

MISCELLANEOUS INPUTS:

Longitudinal Time Code . +4db analog signal
Weather Lift GPI activated when shorted
AC power 85-264VAC 50/60Hz

REAR PANEL CONNECTORS:

Video thirteen, BNC
S-video two, mini-din
LTC XLR plug
Weather Lift GPI 3.5 mono audio plug
RS-232 two, 9 pin D connectors
Modem(optional) RJ11
USB "B" type plug
Power IEC-320 male

FRONT PANEL CONTROLS:

AC power On/Off
Menu knob Push/rotary
Input Selection ... six, push/push momentary
Output Selection Push/push momentary
Test Push/push momentary
Bypass Push/push momentary

VIDEO OUTPUTS:

Encoder outputs:
SD SDI:
Connector one, BNC
Standard SMPTE 259M-C 270Mb/s
Impedance 75 Ohm, terminated
Signal Level 800mV \pm 10%
Propagation Delay 1200ns \pm 5%

SD analog:
CV, Y and G (with sync) two, BNC
C, U and B one, BNC
V and R one, BNC
S-video one, mini-din
All analog outputs unity \pm 5%
Impedance 75 Ohm
Tilt <1% ref. 30Hz square wave
Hum >70db, 1Vpp
Overshoot and Ringing <1%
Propagation Delay 180ns \pm 5%
Signal to noise ratio >50db
Differential gain <1%
Differential phase <1°
DC Offset < \pm 0.2V DC
Frequency Response -3db to 26MHz

Decoder outputs:

SD analog:
CV, Y and G (with sync) two, BNC
C, U and B one, BNC
V and R one, BNC
All analog outputs unity \pm 5%
Impedance 75 Ohm
Character Level(CV,Y,R,G & B) .. 90 IRE
Background Level(CV,Y,R,G & B) 10 IRE
Background Insert(C,U and V) ... 0V DC

ENVIRONMENTAL

Temperature 0° to 50°C (ambient)
Humidity 10% to 90% non-condensing
Power 24 Watts

MECHANICAL:

Height 1.75 inches
Width 19 inches
Depth 10.75 inches
Weight 5 Lbs

